possible *Staphylococcus* spp. were tested with latex agglutination, and positive isolates were plated on CHROMagar™ MSSA/MRSA. Fisher's exact/Wilcoxon rank-sum tests were used to compare the categorical/numerical data between BBE and sleeved providers using SAS version 9.4.

Results. Sixty-three HCW participated; 30 were BBE and 33 sleeved. A comparison of the 2 groups is shown in Table 1. The majority of bacterial growth was morphologically consistent with skin flora; no Gram-negative rods grew. The bioburden estimates and presence of *Staphylococcus aureus* were not different between the groups ($P = 0.099$ and 0.325, respectively). Surveys indicated that BBE providers were more likely to be working in freshly laundered garments ($P < 0.0001$); this was true for all BBE providers except 2 HCW on shift >24 hours. Three sleeved individuals could not remember when they last laundered the garment in which they were providing clinical care.

Conclusion. HCW laundering practices remain suboptimal, particularly among sleeved HCW. The potential impact of hand hygiene on comparative bioburden between sleeved and BBE HCWs remains unknown and is the focus of future investigations.

Figure 1:

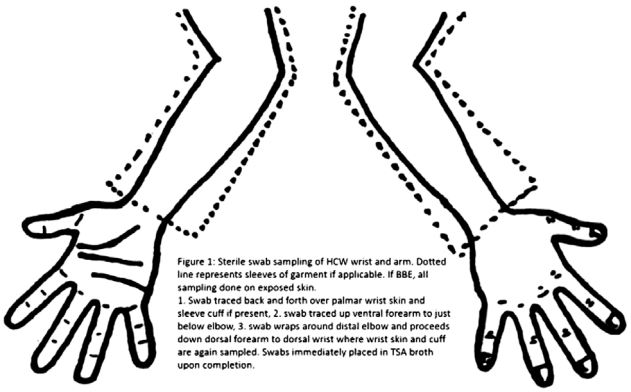

Table 1: Comparison of BBE and Sleeved Providers:

	BBE (N=30)	Sleeved (N=33)	p value
Provider type: n(%)			
Physician	12 (40%)	27 (82%)	<0.0001
Nurse	12 (40%)	0 (0%)	
Other	6 (20%)	5 (15%)	
Clean garments*: n(%)	28 (93%)	16 (48%)	<0.0001
Staphylococcus aureus: n(%)	7(23%)	4(12%)	0.325
MRSA: n(%)	6(20%)	4(12%)	0.498
Optical density**: mean(SD)	2.8(1.8)	3.5(1.5)	0.099

*defined as garment laundered in the last 24 hours

**OD estimated using McFarland Standards

Disclosures. **All Authors:** No reported Disclosures.

1839. Contact Precautions' Effects on MRSA Transmission in Department of Veterans Affairs Hospitals

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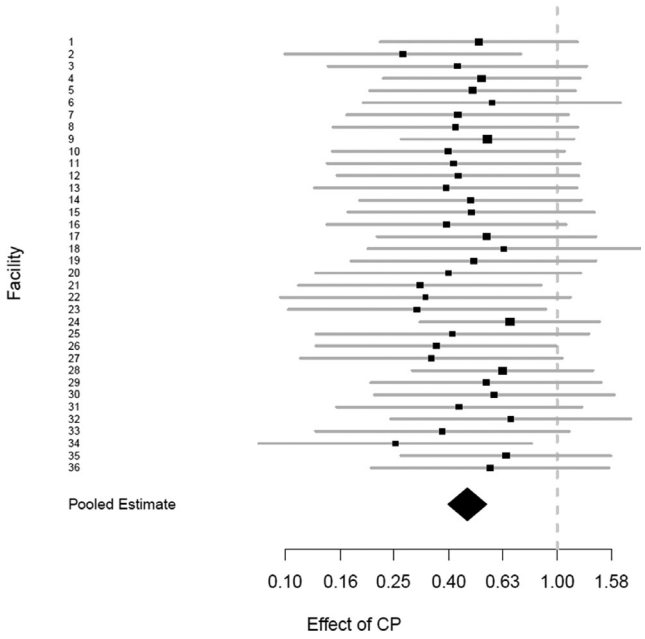
Session: 185. *Staph aureus*: New Perspectives on an Old Foe
Friday, October 4, 2019: 2:45 PM

Background. In 2007, the Department of Veterans Affairs (VA) implemented the methicillin-resistant *Staphylococcus aureus* (MRSA) *Prevention Initiative* nationally in acute care facilities (ACFs). The initiative included universal nasal surveillance for MRSA colonization and implementation of contact precautions (CP) for identified carriers for the duration of their stay. Despite subsequent declines in MRSA infection rates in the VA, debate on CP efficacy continues, due to limited and inconclusive direct evidence. This study estimated CP impact on MRSA transmission in the VA.

Methods. We analyzed 1 year of data from 36 VA ACFs in 2014 using a Bayesian transmission model. The data included admission, discharge, and surveillance and clinical test results for MRSA. Per the MRSA *Prevention Initiative* protocol that placed known carriers on CP, we assumed patients were on CP starting 12 hours after a positive surveillance test, 24 hours after a positive clinical culture, or at admission if the patient had a positive test within 365 days prior to admission. Our model produced estimates of ward-specific transmission rate, surveillance test sensitivity, importation probability, and the CP effect parameter (*CPe*). For $CPe < 1$, CP reduced transmission. Additionally, we combined the estimates of *CPe* using a random-effects model with inverse variance weights to derive pooled estimates and corresponding standard errors.

Results. Facility size varied with a median daily census of 70 patients per day (range: 44–111). During the study period, 144,386 individuals were admitted into one of 36 ACFs, for 215,207 total admissions. The median percentage of admissions requiring contact precautions was 11.0% (range: 6.4%–16.1%). The estimated *CPe* was less than one in each of the 36 facilities with a median of 0.43 (range: 0.25–0.68). Our pooled estimate of *CPe* across all facilities was 0.47 (95% CI; 0.40, 0.55).

Conclusion. We found evidence of reduced MRSA transmission from patients on CP. This result was statistically significant in 5 of the 36 facilities and our pooled estimate suggests contact precautions could reduce the transmission rate by half. Further work is needed to account for imperfect compliance with CP, and for patients on CP for other reasons.



Disclosures. **All Authors:** No reported Disclosures.

1872. Neurodevelopment in Apparently Normal Infants from Zika Virus Positive Pregnancies

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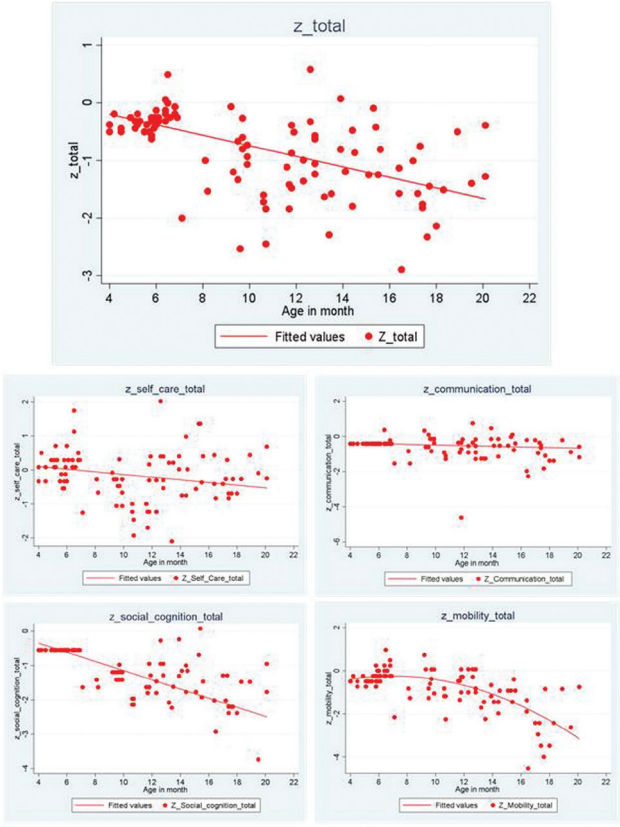
Session: 196. Pediatric Emerging Viral Diseases
Friday, October 4, 2019: 3:15 PM

Background. Congenital Zika syndrome (CZS) is seen in 5–12% of newborns from Zika virus (ZIKV)-infected pregnancies and includes severe neurologic abnormalities. However, the majority of ZIKV-exposed newborns do not have CZS. The risk for neurodevelopmental impairment for infants without CZS following in utero ZIKV is not well known. The objective was to determine whether infants without CZS exposed to ZIKV in utero, have normal neurodevelopment.

Methods. We performed a longitudinal study of neurodevelopment in Colombia for infants exposed to ZIKV in utero who had a normal fetal brain MRI (Mulkey et al, *JAMA Peds* 2019) and normal head circumference at birth. Infant development was assessed by the Warner Initial Developmental Evaluation of Adaptive and Functional Skills (WIDEA) and the Alberta Infant Motor Scale (AIMS) between 6 and 18 months of age. In-person training was done by a neurologist. The AIMS were video-recorded and scored centrally. Interrater reliability for the novel method of video-based AIMS was determined. WIDEA and AIMS scores were converted to Z-scores compared with normative samples. We also compared development between infants with normal and nonspecific findings on cranial ultrasound (US).

Results. Seventy-two non-CZS infants had neurodevelopmental tests; 40 were at a mean (SD) of 5.7 (0.9) months and 66 were at 13.5 (3.2) months of age. Thirty-four had two assessments. The total WIDEA, social cognition, and mobility domain scores became more abnormal with postnatal age (figure). The AIMS scores were similar to the normative sample. Three infants had an AIMS score < 2 SD's below the norm. On cranial US, 19 infants (26%) had a nonspecific finding (lenticulostriate vasculopathy, choroid plexus cysts, subependymal cysts, and/or calcification). Infants with a US finding had a lower WIDEA mobility score than infants with normal US ($P = .054$). There was a trend toward lower AIMS scores in infants with US findings compared with infants with normal US ($P = .26$). AIMS Interrater agreement on video-based scoring was good (ICC = 0.73, 95% CI 0.42, 0.87).

Conclusion. ZIKV-exposed infants without CZS are at risk for neurodevelopmental delay. Nonspecific cranial US findings may represent mild ZIKV-related injury. Long-term neurodevelopmental follow-up is important for all ZIKV-exposed infants.



Disclosures. **All Authors:** No reported Disclosures.

1873. Pregnancy and Birth Outcomes Among Colombian Women with Zika Virus Disease in 3 Surveillance Sites, Proyecto Vigilancia de Embarazadas con Zika

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Session: 196. Pediatric Emerging Viral Diseases
Friday, October 4, 2019: 3:30 PM

Background. Proyecto Vigilancia de Embarazadas con Zika (VEZ) was an intensified surveillance system built upon existing national surveillance of pregnant women with symptoms of Zika virus (ZIKV) disease and conducted in three Colombian cities with a high prevalence of Zika. This analysis of data from VEZ estimates the risk of Zika-associated birth defects among pregnant women with symptoms of ZIKV disease, and among a subset with laboratory evidence of possible ZIKV infection during pregnancy.

Methods. During April–November 2016, pregnant women were enrolled if they were reported to the surveillance system (Sivigila) or visited participating clinics with symptoms of ZIKV disease. Maternal and pediatric data were abstracted from prenatal care, ultrasound, and delivery records, as well as from pediatric or specialist visit records. Available maternal and infant specimens were tested for the presence of ZIKV RNA and/or anti-ZIKV immunoglobulin (IgM) antibodies.

Results. Of 1,223 women enrolled, 47.8% and 34.3% reported first or second trimester symptom onset, respectively. Of 381 pregnancies with maternal and/or infant specimens tested, 108 (29%) had laboratory evidence of possible ZIKV infection during pregnancy; half of these (53.3%) were positive for ZIKV RNA only, 37.4% for IgM antibodies only, and 9.3% for both. Of 1,190 of pregnancies with known outcome, 63 (5%) had Zika-associated brain or eye defects; among the subset with any laboratory evidence, 12 (11%) had Zika-associated brain or eye defects. The prevalence of Zika-associated brain or eye defects was 5.9% (35/593) and 4.5% (19/423) among pregnancies with symptom onset in the first and second trimester, respectively.

Conclusion. Among pregnant women with symptoms of ZIKV disease enrolled during the height of the ZIKV epidemic in Colombia, prevalence of any Zika-associated brain or eye defect was 5%, with a higher prevalence among those with laboratory evidence of possible ZIKV infection. Rapid enhancements to Colombia's national surveillance enabled the estimation of the risk of birth defects associated with ZIKV disease in pregnancy.

Disclosures. **All Authors:** No reported Disclosures.

1874. Comparison of the Risk of Birth Defects in Live Births From Pregnant Women Infected and Not Infected by Zika Virus in Guadeloupe, 2016–2017

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Session: 196. Pediatric Emerging Viral Diseases
Friday, October 4, 2019: 3:45 PM

Background. In the French Territories in the Americas (FTA), the risk of birth defects possibly associated with Zika virus (ZIKV) infection was estimated at 7% among fetuses/infants in a cohort of 546 women who developed a symptomatic RT-PCR confirmed ZIKV infection during pregnancy (NEJM 2018;378:985–94). There was no concomitant prospective cohort of pregnant women without ZIKV infection to use as a control group.

Methods. In Guadeloupe, one of the 3 FTAs that participated in the FTA cohort study, pregnant women were recruited at the time of delivery and tested for ZIKV infection. Women who had a confirmed negative IgG serology test for ZIKV at delivery and no other positive ZIKV test during pregnancy were considered to be ZIKV noninfected. Information on the course of the pregnancy was collected retrospectively and outcomes of live born infants of ZIKV noninfected women were analyzed, using the same definition criteria as those used for the FTA cohort study. Pregnancy outcomes were compared with those of the 241 ZIKV-exposed live born infants in Guadeloupe, extracted from the FTA cohort.

Results. Of the 490 live born infants without in-utero exposure to ZIKV, 42 infants (8.6%) had neurological abnormalities that were described as "potentially linked to ZIKV infection"; all but one of these were microcephaly without any other brain or clinical abnormalities. The proportion of such abnormalities was not statistically different from that observed in the 241 live born infants with ZIKV exposure (6.6%, $P = 0.36$). When re-considering the combined 8 fetuses and 241 infants of women with confirmed ZIKV infection in Guadeloupe from the FTA cohort, only two (0.8%) live born infants and three (1.2%) medically aborted fetuses had birth defects that could still be linked to ZIKV infection.

Conclusion. Isolated anthropometric and other mild neurological abnormalities had the same prevalence among live born infants with and without *in utero* ZIKV exposure. The high prevalence of isolated microcephaly among ZIKV noninfected women in our study population suggests that the sensitive definition for microcephaly, using a −2 SD cut-off with international growth curves, may lead to an overestimate of the rate of neurological complications of ZIKV infection during pregnancy.

Disclosures. **All Authors:** No reported Disclosures.

1875. La Crosse Virus Neuroinvasive Disease in Children: A Contemporary Review and Evaluation for Predictors of Disease Severity

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Session: 196. Pediatric Emerging Viral Diseases
Friday, October 4, 2019: 4:00 PM

Background. La Crosse Virus (LACV) is the most common neuroinvasive arboviral disease in children. Contemporary data on clinical presentation, management, outcomes, and predictors of disease severity are lacking.

Methods. A retrospective analysis was performed of children (0–18 years) admitted to Nationwide Children's Hospital from January 2009 to December 2018 diagnosed with LACV neuroinvasive disease (LACV-ND). LACV-ND diagnosis was defined as a compatible clinical illness and serum serologic detection of LACV in the absence of other infectious etiologies. Demographic, clinical, laboratory, electroencephalography (EEG), radiologic, and outcome data were recorded. Severe disease was defined as the presence of clinical or electroencephalographic status epilepticus, SIADH, PICU